



SERIES

Outback Wrangler

EPISODES IN THIS SERIES

Croc Swarm, Wild Horse Bust, Flying Crocs and Predator Island

EDUCATION SHEET EPISODE

Croc Swarm

SCHOOL LEVEL

Upper Primary

Junior Secondary

EDUCATION DESCRIPTION: Croc Swarm

Australia's saltwater crocodiles, commonly known as salties, are the largest and most dangerous of the world's 23 crocodylian species. Once hunted to the verge of extinction, saltwater crocodiles have been afforded the highest level of protection in Australia since 1972. But their numbers have grown out of proportion, and there is some concern that, if numbers keep rising, safari hunting will start. Charismatic narrator, the irrepressible Matt Wright, flies helicopters and works with wild and dangerous animals. With this unique skill set, Matt is in great demand to relocate rogue salties. Follow him to four different saltwater crocodile habitats in the Northern Territory, where he and his mates harvest crocodile eggs as a humane method of population control, and to provide stock for sustainable crocodile farming.

TEACHER BACKGROUND INFORMATION

Once considered a dispensable menace, crocodiles were hunted mercilessly in Australia until their numbers sank to a dangerously low level. In 1972 crocodiles were protected by legislation, and hunting them became illegal. However, an interesting dilemma has arisen, as towns spread further into crocodile habitats, and crocodile numbers go unchecked, escalating the likelihood of attacks on humans.

Furthermore, as the saltwater crocodile population continues to grow, there are fears that hunting will be resumed. Hunters not only target the largest crocodiles, which are the vitally important breeding stock of wild populations, but often are not the best shots, resulting in many injured animals.

Enter Matt Wright, a latter-day Steve Irwin, helicopter pilot and predator relocation expert. Endowed with bush skills he learned while growing up in the Australian outback, Matt has developed ingenious ways of catching saltwater crocodiles with lightweight traps, and – more dramatically – of harvesting eggs by slinging directly onto croc nests from a helicopter.

In action-packed *Croc Swarm*, Matt takes us to four different saltwater crocodile habitats in the Northern Territory, where he and his mates share their passion and experience. Matt shows us how to sling out of a helicopter onto a crocodile's nest to harvest eggs as a humane means of population management. Along the way, he shares the knowledge he's learned about these fascinating predators, and how to stay safe in their environment.

CURRICULUM POINTERS

Upper Primary Curriculum

Geography is the investigation and understanding of the earth and its features and the distribution of life on earth, including human life and its impacts. It is the study of the many different “places”, or environments, which make up our world and is described as “the why of where”.

Shape of the Australian Geography Curriculum 2011: Introduction

Science is a dynamic, collaborative and creative human endeavour arising from our curiosity and interest in making sense of our world through exploring the unknown, investigating universal mysteries, making predictions and solving problems.

Australian Science K-10 Curriculum 2010: Rationale

Junior Secondary Curriculum

Geography shows students ways in which they can positively influence their world as active local, national and global citizens by encouraging them to question why things are the way they are, to investigate issues and to evaluate alternative, more sustainable futures. Through exploration and discussion, students develop an informed view of their responsibilities towards the environment and to people throughout the world.

Shape of the Australian Geography Curriculum 2011: Introduction

In addition to its practical applications, learning science is a valuable pursuit in its own right, providing opportunities for critical and creative thinking, challenge and leisure. The science curriculum provides opportunities for students to experience the joy of scientific discovery and to nurture students' natural curiosity about the world around them. These ideas resonate with the concept of scientific literacy, a term that is well established in the science education literature.

Australian Science K-10 Curriculum 2010: Rationale

CURRICULUM OUTCOMES

Upper Primary

In undertaking these tasks, students of Science will:

- *Develop an interest in science and a curiosity and willingness to explore, ask questions and speculate about the changing world in which they live*
- *Develop an ability to communicate their scientific understandings and findings to a range of audiences, to justify their own ideas on the basis of evidence, and to evaluate and debate scientific arguments and claims whilst respecting alternative viewpoints and beliefs.*

Australian Science K-10 Curriculum 2010: Aims

In undertaking these tasks, students of Geography will:

Develop a sense of wonder, curiosity, knowledge and interest about the variety of environments, peoples, cultures and places that exist throughout the world, providing students with a sound geographical knowledge of their own place, of Australia, and of the world.

Shape of the Australian Geography Curriculum 2011: Aims

Junior Secondary

In undertaking these tasks, students of Science will:

- *Develop an ability to solve problems and make informed, evidence-based decisions about current and future applications of science while taking into account moral, ethical and social implications*
- *Develop an understanding of historical and cultural aspects of science as well as contemporary science issues and activities and an understanding of the diversity of careers related to science.*

Australian Science K-10 Curriculum 2010: Aims

In undertaking these tasks, students of Geography will:

- *Explore and gain a good understanding of geographical thinking including its perspectives, concepts and ways of explaining*
- *Become thoughtful and active local, national and global citizens, and ... understand how they can influence the futures of places.*

Shape of the Australian Geography Curriculum 2011: Aims

STUDENT LEARNING TASKS

Upper Primary

Task 1

Download a map of Australia from:

<http://travel.nationalgeographic.com/travel/countries/australia-map/>

Save the map to your files, or print it and paste it into your workbook.

- Do some Internet research to find out where saltwater crocodiles live in Australia
- Highlight this area on your map
- In 50 words, write a general description of the saltwater crocodile's habitat.

Task 2

Name the four different kinds of geographical locations where saltwater crocodiles nest in the Northern Territory. Describe each of them in a sentence or two.

Task 3

Write a description of a saltwater crocodile that includes the following:

- Type of animal
- Maximum size
- Habitat
- Diet
- Hunting technique
- Method of reproduction

Task 4

In two or three sentences, explain how, when and where saltwater crocodiles and people might come in contact with each other.

What advice could you give people who live in a saltwater crocodile environment to reduce the chance of a deadly encounter?

Task 5

Imagine Matt Wright has invited you to go with him to harvest saltwater crocodile eggs in the Northern Territory. Write down the following:

- Five things you would take with you
- Five things you expect him to take
- Five things you will be sure to do
- Five things you will be sure not to do.

Junior Secondary

Task 1

Do some Internet research to find answers to the following questions:

- What is the population of the Northern Territory?
- What is the climate like in the Northern Territory? Include average maximum and minimum temperatures in your answer.
- What is the major source of income for most people who live in the Northern Territory?
- What are two other main sources of income there?
- What percentage of the Northern Territory has been set aside as reserve, national park, or other conservation areas for protecting wildlife habitat?

Task 2

Write approximately 100 words to describe the life cycle of a saltwater crocodile. In your description, include the maximum size and life span of salties.

Task 3

In 150 words, explain from a helicopter pilot's point of view, and from a harvester's point of view, the process of slinging on to a crocodile's nest to collect eggs. Accompany your description with a diagram.

Task 4

Use the Internet to find answers to the following questions about water buffalo in Australia:

- Where did they originally come from?
- When did they arrive in Australia?
- Why were they brought here?
- Who first brought them here?
- What is the extent of their range now?
- What are 3 problems these introduced animals cause?

Task 5

Until 1972, crocodiles were fair game for hunters in Australia. Since then, the animals have been protected by government legislation and some people think their numbers have grown out of control.

Write a letter of about 200 words to the Minister for the Environment to voice your opinion about saltwater crocodiles in Australia and how you think their numbers should be managed.